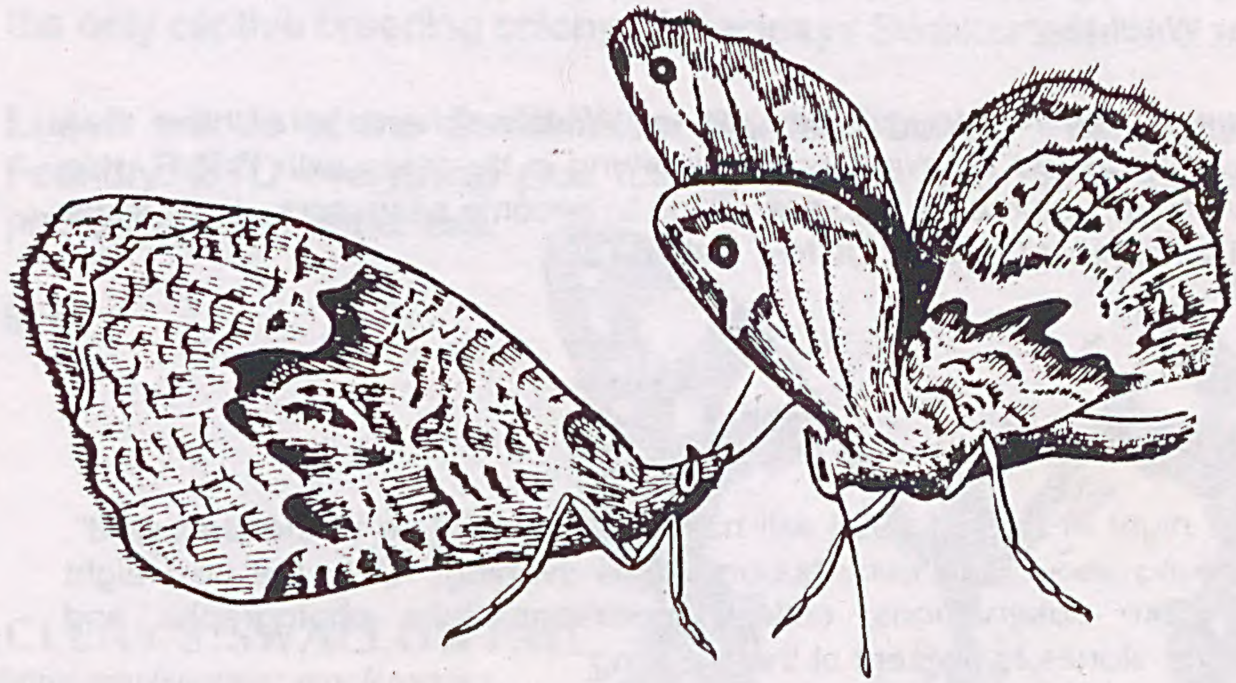
Field Naturalists Club of Ballarat
Incorporated

DECEMBER 1995

EXCURSION - NEWS SHEET

Meeting	**Dec 1**	**Dr G Ambrose: Butterflies in Remnant Vegetation**
Meeting	**Feb 2 '96**	**Mr G Binns and Mr L Fink: Western Australia revisited**
Excursion	**Dec 3**	**Skydancers Butterfly Farm, Harcourt** **Mrs M Rotheram**
Excursion	**Feb 4 '96**	**Mount Cole Traverse: Dr K Mcdonnell**



President: Mr J Gregurke
Secretary: Mr L Fink
Treasurer: Mr G Binns
Editor: Mr A Dyson

PO Box 328W, Ballarat West 3350

MEETINGS are held at the School of Mines & Industries, Art Building, Lydiard St. Sth., 7.30 pm.
EXCURSIONS start at "Book City", cnr Sturt and Armstrong Sts 9.30 am (full day outings) or 1.30 pm (half day)

DIARY DATES

Thursday January 25 1996 7.30pm - Committee meeting at Meredith (Lyndsay Fink)

Victorian Naturalist

A reminder about missing copies Peter Fry is looking for. Please check at home for:

1988 Vol 105: 2,3,5,6
1989 Vol 106: 1,2,3,6
1990 Vol 107: 5,6
1992 Vol 109: 1
1994 Vol 111: 2

Land for Wildlife

Land owners applying to join the land for Wildlife scheme must have they properties inspected. Gavin Cerini is working in this area with DCNR. He would welcome volunteers who are willing to become assessors. For further information contact Gavin at DCNR, Ballarat.

Life in the Backyard

Members night in August 1996 will have the theme "Life in the Backyard". Start thinking about your contribution to this evening. Over the next eight months make observations, collect specimens, take photographs and prepare you stories to present at this meeting.

Skydancers Butterfly Gardens Harcourt, December 3

The excursion will leave Book City at 9.30am sharp. Some members may prefer to go there direct to save time. We have a booking with Gary Sobey to give us a talk and a tour at **11 am.**

The Butterfly Farm is between Barkers Creek and Harcourt. Go up the main street of Castlemaine and continue north on the same road past Thompsons Foundry and for about five km past the railway bridge. The farm is on the **right** on the corner of Blackjack Road. This is a 100 kph zone so take care making the right hand turn in Sunday traffic - start slowing at the "Little Red Apple".

Unlike the tropical butterfly house at the Melbourne Zoo, this is an 'open air' collection and specialises in butterflies endemic to south east Australia, many of which cannot be housed at the zoo. We can expect to see Imperial Blues, Blue Triangles and the only captive breeding colony of Macleays Swallowtails.

Lunch will be at the Castlemaine Gardens behind Thomsons Foundry. BYO everything plus folding chairs - and cameras to photograph the butterflies.

M R.

MACLEAY'S SWALLOWTAIL
Graphium macleayanus macleayanus

REHABILITATION OF GOLD MINE SITES – Ms JANE WILLIAMS

Jane came to speak at our Stella Bedggood Memorial Lecture on November 3 and then met us at Stawell on Sunday 5 to show us some of the work she has been doing at gold mine sites in the Stawell area. The talk and the slides she showed on Friday and the visits to the sites she had discussed gave us a good understanding of the enormous amount of work she has done and the complexity of the tasks.

For the past fifteen years Jane has been doing work for the operating companies of the Stawell Gold Mines. During this time she established the Pomonal Wildflower Nursery.

The mining sites cover an area of about 800 ha with Jane working on sites of 4 to 5 ha and smaller within this area.
She decided that local indigenous species should be used in her work whenever possible. Methods of planting - direct seeding and tube planting would both be tried (with both being successful and otherwise in particular situations). About 600 trees were planted during each of the first 2 years at Stawell and after 5 years this had increased to almost 10,000 annual plantings.

Working on mullock heaps was one of the early projects. No thought was given to the positioning and shaping of the early mullock heaps. They have extremely steep sides and are very difficult to work on. Some topsoil and seed was thrown from the top and in some areas it was possible to use a bulldozer with a long arm to work from the bottom. Jane used a method of abseiling to work on the batters and managed some seed and tube stock plantings. More recent mullock heaps have been better shaped and easier to work on. Contour ripping prevents some erosion and a rim created on top of the shaped heaps prevents overflow down the sides. Mulched leaves, old branches and stumps are also used to inhibit erosion and provide some protection and stability for the new growth.

Jane tried various seeds on the mullock heaps and found most of the soft seeded species that had not germinated died within a few months. Legumes tended to do well - particularly wattles. She also had success with dillwynias and daviesias.

One particularly successfull rehabilitation exercise (initially) was done on a tailings dam wall. Waste rock is used and a strong bank is built. Good quality clay is used and the walls go up in height as a dam fills. Jane was able to make use of a lot of mulch and topsoil and after 5 years the walls were very well treed. Then questions arose about the suitability of trees on such sites (roots disturbing the bank?) and all growth was removed and replaced by oats and some native grasses.

Jane has been satisfied with wildlife corridors created on granite sand areas which had previously been grazed - often by goats. Natural regrowth and successful plantings and seedings have resulted in substantial coverage here. Some experimental areas have been fenced and individual guards about stipas and the Austral Indigo (popular with kangaroos and rabbits).

Jane has tried to provide some growth base for her plantings. She has tried a capping of topsoil on top of an old tailings dam with limited success - the soil is too acidic for most species. She has had mixed results when putting mounds of topsoil of top of the ground and planting salt resistant species such as the seeds of the River Red Gum from the Lake Albacutya area.

Our excursion with Jane led us to many of the sites she discussed at the meeting. Our group was most impressed with the variety and the strength of growth over a 5 year period at a reshaped mullock heap. Here acacias (*genistifolia, paradoxa, melanoxylon, pycnantha*) were flourishing. Eucalypts (*leucoxylon, melliodora, microcarpa, ovata, baxteri* and others) were several metres high and there was thick understory and ground cover. Birds, kangaroos (and unfortunately rabbits) are present and the whole area is a credit to Janes abilities.

Our thanks to Jane for spending most of her weekend with the Ballarat FNC. Many of us plan to visit her nursery at Pomonal in the future.

VD

Brisbane Ranges Campout — 17-19th November, 1995

Baanya Biami provided comfortable accommodation for our 1995 club campout. We slept in concrete water tanks which are set into the side of a hill and covered with soil. Their construction gave good insulation and the view across the Reilly Creek gully was beautiful.

Set in Bushland which borders on the Brisbane Ranges National Park, the wildlife came to us. As we drove into the camp an Echidna walked across the track and climbed up the steep bank at the side. A Koala with a young one was in a tree next to the lounge when we arrived. On a spot light walk we saw six Ringtail Possums and one Brushtail. In the mornings up to thirty Eastern Grey Kangaroos grazed in a cleared paddock next to the camp. Rabbits completed the list of easily observed mammals.

At many sites visited over the weekend we heard frogs. The loud, clear "bonk" of the Banjo Frog made is easy to identify. With the help of a tape we were able to recognise Brown Tree Frogs, Verreaux's Tree Frog and Spotted Marsh Frog calling.

Our birdlist for the weekend grew to nearly 60 species. The Yellow Gums flowering around the camp attracted New Holland and White-naped Honeyeaters, Eastern Spinebill and Little Lorikeet. Over cleared land on the edge of the National Park we saw a range of raptors. A pair of Whistling Kites appeared to have a nest in a tree near a farm dam. A Brown Falcon landed on a rabbit warren. Five Wedge-tailed Eagles were soaring around and we saw a Swamp Harrier. At the site of an abandoned slate quarry we heard and then saw a pair of Peregrine Falcons. Even across a wide valley we had good views of the bird's pale front and bright yellow legs as it perched in dead tree.

Brisbane Ranges are well known for diversity of plants. Many of the shrubs were flowering. Shrubby Platysace put on colourful displays with the umbels of pink-purple buds opening to white flowers. The delicate Mitchell's Wattle with pale lemon flowers was seen in many places. Rosy Heath-myrtle, Sticky Boronia and Rough Mint-bush were flowering well. A large variety of yellow daisies were flowering but the most spectacular was the Showy Podolepis with flowers up to 7cm across on top of twisty stems. On a roadside a shrub with creamy-white flowers attracted our attention. It was identified as White Kunzea which is not native to the area but the plants probably came from garden prunings which had fallen from a trailer.

The success of the weekend was ensured by Lyndsay Fink's knowledge of the area and the planning done by Margaret Rotheram and Greg Binns. Thank you to these people from all who enjoyed the weekend.
JG

Proposal for an "Alternative Technologies and Sustainable Living Park"

BEN - Box 2103, Mail Exchange Bakery Hill, Ballarat 3354

Details from an article in *Green Ballarat* - the newsletter of the Ballarat Environment Network (BEN) - Spring edition 1995.

The BEN committee are interested in responses to this idea. It is felt that a local "environmental park" could provide:

1 an educational facility to promote alternative and appropriate technologies and to provide demonstrations of ideas for sustainable living
2 a centre to display state-of-the-art knowledge from research activities in areas such as resource conservation and management, environmental engineering and protection; a centre to practically demonstrate systems of sustainable farming, design and construction of high-efficiency, low impact dwellings, alternative and independent power systems, waste management and recycling
3 a place to facilitate the exchange of ideas and skills in sustainable living
4 an eco-tourist attraction of international standing.

The article mentions a possible model - the *Centre for Alternative Technology* in Wales. In the '60s a group of environmentalists took over an old slate quarry and invited help from people who were willing and able to donate their talents to build a centre that would be a practical expression of low impact living. The result a generation later is a centre of international standing demonstrating practical ways to recycle and reclaim, permaculture and alternative farming and horticultural methods, low energy-use housing, methods of alternative power generation, energy efficient transport systems etc

BEN suggests a local centre could provide - visual displays, teaching and demonstration facilities, examples of types of power generation, earth building and water conservation techniques, soil conservation and mulching methods, seed banks and many other facilities. These could be provided by and/or for such groups as - the Regional Development Board, Landcare groups, local firms already marketing 'alternative' products, schools, University of Ballarat, architects, builders and designers, LEAP and other community and government sponsored programs.

Australian Mammals Found in the Ballarat Area No9

Large Footed Mouse Eared Bat.
Myotus adversus, Order Chiroptera, Sub Order Microchiroptera, Family Vespertilionidae.

Unusual social behaviour makes the Large Footed Mouse Eared Bat one of Australias most interesting Vespertilionids, Colonies of 10 to 15 occasionally several hundreds are found in caves, tunnels, mines, under bridges and in buildings, in the tropics sometimes dense foliage.

The males have a territory and a harem of Females. During the breeding period, males roost alone and defend their territory, older males are recognised by the scars from aggressive encounters.

One young is produced in November or December, they are torpid in winter remaining in roosts separate from nursing sites.

Colonies are never far from water, indeed, they swoop over water catching aquatic insects this method is used by other species of Myotus, although Myotus are more widely spread around the world than any other Bat genis, with at least two of it's 60 species in any large geographical area, only one species is found in Australia, aridity and the lack of large areas of water are blamed.

Their status is comparatively rare over a limited range, there are two sub species.

They should be foun d over the lakes in the Ballarat area.

Elfin

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